

Adobe® Flash® Media Server 3.0.1 Read Me

Welcome to Adobe® Flash® Media Streaming Server 3.0.1 and Flash Media Interactive Server 3.0.1! This document contains late-breaking product information and updates concerning this release.

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Important Compatibility Announcement

Adobe recommends that all Flash Media Interactive Server 3 and Flash Media Streaming Server 3 customers upgrade to this release for compatibility with the Flash Player 9 April 2008 Security Update. Please see issue 1688970 in the Known Issues section for more details.

Minimum system requirements

The Flash Media Server 3.0.1 system requirements for production environments are:

| OS | Version | Memory | Processor |
|--------------------|--|--------------------------------|--|
| Microsoft® Windows | Windows Server® 2003 SP1 (All 32-bit editions) | 2 GB minimum, 4 GB recommended | 3.2 GHz Intel® Pentium® 4 processor (dual Intel Xeon® or faster recommended) |
| Linux® | RedHat® 4 32-bit only | 2 GB minimum, 4 GB recommended | 3.2 GHz Intel® Pentium® 4 processor (dual Intel Xeon® or faster recommended) |

The Flash Media Server 3.0.1 system requirements for development environments are:

| OS | Version | Memory | Processor |
|--------------------|-----------------|--------|---|
| Microsoft® Windows | Windows XP® SP2 | 1 GB | 1 GHz Intel® Pentium® 4 processor or faster |

Install your software

To install Flash Media Server on Windows:

1. Double-click the installer application and follow the on-screen instructions.
2. Enter a serial number. If you don't enter a serial number, Flash Media Development Server installs.
3. During the installation process you will be asked to enter a user name and password for the first valid server administrator. These values are written to the fms.ini file which is

located in the conf folder after installation. (You can use the Administration Console to add other administrators later.)

4. Accept the default server ports or enter new port numbers.
5. The final installation step gives you the opportunity to view the Readme.htm file, start Flash Media Server, and select the option to start Flash Media Server manually when you reboot your computer. Select any options you'd like, and click Finish.

The installation is complete. If you configured it to start automatically, the Flash Media Server service starts.

6. To start the server manually, select Start > Programs > Adobe > Flash Media Server 3 > Start Adobe Flash Media Server 3 and Start Flash Media Administration Server 3
7. To open the Flash Media Administration Console, select Start > Programs > Adobe > Flash Media Server 3 > Flash Media Administration Console.

To install Flash Media Server on Linux:

1. Log in as a root user (required to install Flash Media Server).
2. Open a shell window and switch to the directory with the installation file, FlashMediaServer3.tar.gz
3. Unzip and untar the installation file. A directory with the installation program is created.
4. Switch to the directory that was just unzipped.
5. Start the installation program with the following command: **./installFMS**
6. The installation program starts and displays a welcome message.
7. Press Enter to start the installation. Follow the installation instructions on your screen. During the process you will be asked to
 - o Enter a serial number. If you don't enter a serial number, Flash Media Development Server installs.
 - o Enter the installation directory and ports which the server will use
 - o Enter an administrative user name and password for the first valid server administrator. These values are written to the fms.ini file which is located inside of the conf folder after the installation.
 - o Enter a user for Flash Media Server processes to run as. The default is the "nobody" user. (The user you select is also the owner of the Flash Media Server files.) Your choices are written to the fms.ini file. You can edit the fms.ini file to modify this and other security properties later, if needed.
8. Review the summary of the installation options you have chosen, which are displayed in the installer.
9. To start the server manually, go to the installation directory (default is /opt/adobe/fms/). Use the command **./fmsmgr server start** to start Flash Media Server and **./fmsmgr adminserver start** to start Flash Media Administration Server.

The installation is complete. If you configured it to start automatically, the Flash Media Server service starts.

Uninstall your software

To uninstall Flash Media Server from a Windows computer:

1. Select Start > Programs > Adobe > Flash Media Server 3 > Uninstall Adobe Flash Media Server 3
2. In the confirmation dialog box, click Yes to uninstall Flash Media Server.
3. Flash Media Server is removed from your computer. A second confirmation dialog box appears when the process is complete.

To uninstall Flash Media Server from a Linux computer:

1. Log on to the server where Flash Media Server was installed.
2. Switch to the root user, or a user with root permissions. Normally you would use `su - root` to switch to the root user.
3. At the UNIX shell prompt, enter **`cd /opt/adobe/fms.`**
4. By default, `/opt/adobe/fms` is the directory where Flash Media Server is installed. If you installed the server in a different directory, replace `/opt/adobe/fms` with the actual installation location.
5. Execute the uninstall script **`./uninstallFMS.`**
6. Follow the displayed uninstall instructions.

What's new in this release

The following issues have been fixed in this release:

| Issue | Description |
|---------|--|
| 1722900 | Calling NetStream.receiveVideo(false) while playing an MP4 file incorrectly stopped the audio along with the video. |
| 1720003 | Admin API command broadcastMsg did not work correctly when called through HTTP |
| 1719613 | Flash Media Server and the FLVCheck tool failed on MP4 files that ended in a string tag box. |
| 1711816 | Fixed an intermittent failure of onMetadata delivery in a Livecast topology spanning high latency links. |
| 1710536 | Server failed to stream H.264 files containing an stss (Sync Sample Box) with 0 entries. |
| 1710536 | Server was unable to stream H.264 files that contained an empty Sync Sample Box ('stss') with 0 entries. |
| 1709219 | Excessive and unnecessary file open operations by the MPEG4 module introduced a high latency in streaming MP4 (and similar formats) files. |
| 1706790 | Access log entries from the fmsedge process were missing x-pid, x-cpu-load and x-mem fields. |
| 1706667 | Fixed a minor memory leak in the Edge server when playing recorded streams. |
| 1706600 | Recorded streams stopped playing prematurely due to an aggressive but incorrect error check at file segment boundaries. |
| 1700287 | Access log entries from the Edge process did not properly quote certain fields such as c-referrer and c-user-agent. |
| 1700054 | The server incorrectly held onto data from the authorization adaptor by reference instead of making a copy, resulting in data loss and a potential crash. |
| 1697445 | Message aggregation broke audio stop and start notification in a stream, resulting in video stalling when the audio stopped. |
| 1691938 | Edge and Origin servers reported different values for sc-stream-bytes for H.264/AAC content. |
| 1688970 | A media streaming security vulnerability was fixed in both Flash Player and Flash Media Server. As a result, Flash Media Interactive Server 3 and Flash Media Streaming Server 3 customers who are streaming H.264 content to a version of Flash Player later than version 9.0.115.0 will need to upgrade their server to version 3.0.1. |
| 1687728 | FLVCheck tool did not warn about FLV files that have no metadata. |

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|----------------|--|
| 1685097 | The server was unable to handle HTTP requests with headers greater than 1024 bytes. |
| 1681019 | Recording a stream that had no data flowing resulted in the corresponding file being opened and never closed by the server. |
| 1679775 | The F_STREAM_NAME field was missing in the Authorization adaptor's E_UNPUBLISH event. |
| 1679292 | Server reported incorrect video frame rate for F4V files created by Flash Media Encoder. |
| 1675356 | Authorization adaptor events that were neither authorizable nor notifiable resulted in event objects being leaked. |
| 1671744 | The server did not honor the umask configuration when creating files on Linux. |
| 1666120 | Vhost bandwidth cap did not work properly due to a 32 bit integer overflow, and resulted in wide bandwidth fluctuations. |
| 1663050 | Applications could hang under rare circumstances and stop processing new connection requests due to a deadlock involving streaming, scripting and garbage collection subsystems. |
| 1662162 | Crossdomain responses were not configurable and always returned "". This fix allows this to be configured via a new tag <CrossDomainPath> in Server.xml. |
| 1660146 | Clients that responded slowly for any reason, possibly due to high connection latency, sporadically resulted in a high server cpu usage. |

Known Issues

The following issues were known to exist at the time of release:

| Issue | Description |
|----------------|--|
| 1728302 | Streaming H.264/AAC content from invalid truncated files causes intermittent server crash. |
| 1691840 | Registering very large SWFs, those around or in excess of 1 GigaByte in size, for SWF Verification, can cause the server to exhaust available memory. |
| 1656058 | The server behavior is not guaranteed when streaming corrupted files, especially those containing H.264/AAC content, and may result in issues ranging from severe performance degradation, excessive memory usage and possibly server process crashes. Please use FLVCheck tool to ensure content integrity before it is deployed. |
| 1638951 | When playing a server side stream, a minimum bufferTime must be set on the client side to ensure smooth playback. |
| 1638498 | When playing an mp3, the .mp3 file extension should not be included in the stream name |
| 1631225 | When upgrading an FMS 2 Edge server to FMS3, you should not attempt to use media cache files generated by the previous server version. Any existing cache files should be cleared before using FMS3 as an Edge server. |
| 1630621 | Very low frame rate H264 videos may take a long time to start if the buffer is set too short. |
| 1630008 | Pause command in Flash Player 9.0.115 or later versions will not suspend the buffer from getting filled. If the playback is resumed before the buffer is full, pause and unpaue events will not be logged in the server's access.log. |
| 1628134 | Recording H.264 content on the server is not supported in this version. |

- 1626125** When the server is overloaded, it can result in non-paged pool memory being exhausted leading to instability which may require rebooting the system (not just restarting Flash Media Server). For more information on this non-paged pool spike, please see <http://support.microsoft.com/kb/931311>.
- 1622396** Live Aggregate Messages feature enables higher performance live streaming but is incompatible with collapsing audio messages. Hence Audio Collapse should be disabled in this situation.
- 1611644** The OnImageData in H264 streams is not supported in this version.
- 1602779** Server side play does not play if the file size is less than the configured buffer time (MinBufferTime tag in Application.xml), or 2 seconds.
- 1525751** While using AMF0 mode with AS3, If Date (or XML) is being passed as an argument in a RMI (NetConnection.call, NetStream.send or SharedObject.send), then it should be passed as the last argument. More specifically, no argument should be sent as reference after a Date or XML has been added to the argument list of an RMI. Using AMF3 with AS3 is recommended.
- 1322937** Use Microsoft .NET 2003 or Microsoft Visual C++ 2005 to compile adaptors on Windows. Use GNU Compiler Collection 3.4.x to compile adaptors on Linux.
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Other resources

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